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मानक

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IS 4244 (1967): Retractors, skin, double ended [MHD 1: Surgical Instruments]



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IS : 4244 - 1967

REAFFIRMED

Indian Standard
SPECIFICATION FOR
RETRACTORS, SKIN, DOUBLE ENDED

UDC 615.472.4



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INDIAN STANDARDS INSTITUTION
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 1



Gr 2

October 1967

Indian Standard

SPECIFICATION FOR RETRACTORS, SKIN, DOUBLE ENDED

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Indian Standard

SPECIFICATION FOR RETRACTORS, SKIN, DOUBLE ENDED

0. FOREWORD

0.1 This Indian Standard was adopted by the Indian Standards Institution on 31 August 1967, after the draft finalized by the Surgical Instruments Sectional Committee had been approved by the Consumer Products Division Council.

0.2 The formulation of Indian Standards on surgical instruments has been taken up on the recommendations of the Advisory Committee for the Development of Medical Instruments, Equipment and Appliances, of the Government of India.

0.3 This standard is one of a series on surgical instruments. Other standards published so far in the series appear on P 6.

0.4 For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS: 2-1960*. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

1. SCOPE

1.1 This standard lays down the requirements for double ended skin retractors.

2. MATERIAL

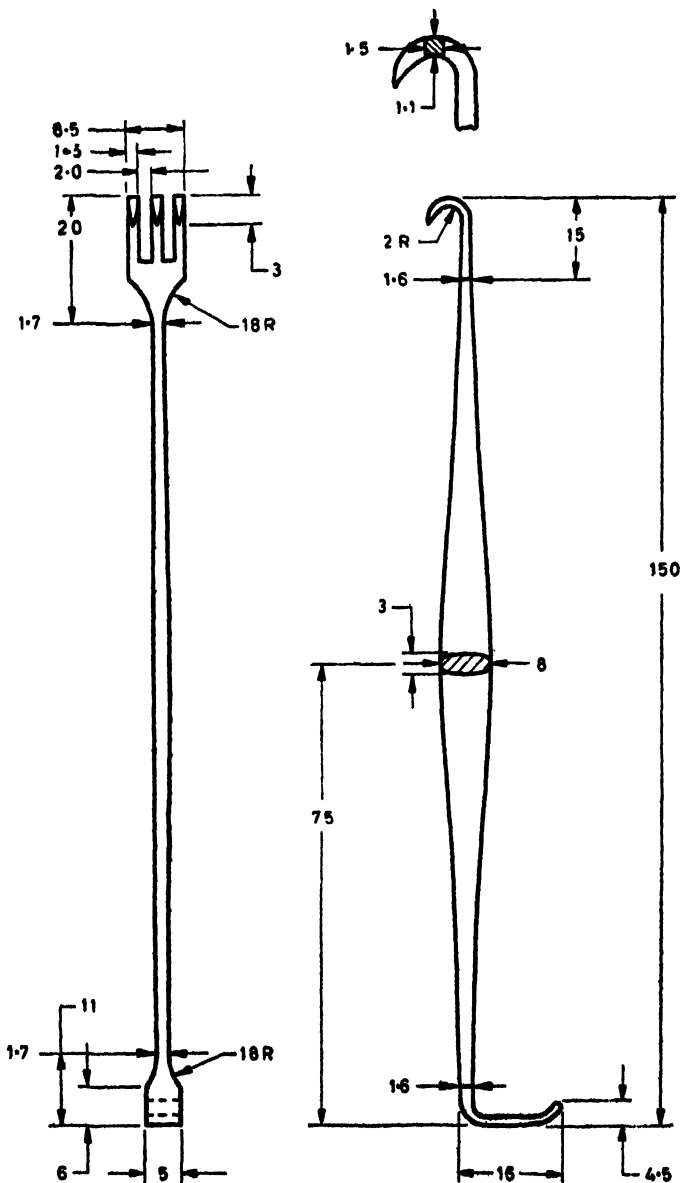
2.1 The retractors shall be made of stainless steel conforming to designation 22Cr13 or 30Cr13 of Schedule V of IS : 1570-1961†.

3. SHAPE AND DIMENSIONS

3.1 The shape and dimensions of the retractors shall be as given in Fig. 1.

*Rules for rounding off numerical values (*Revised*).

†Schedules for wrought steels for general engineering purposes.



All dimensions in millimetres.

FIG. 1 DOUBLE-ENDED SKIN RETRACTOR

4. WORKMANSHIP AND FINISH

4.1 The retractor shall be soundly forged and balanced on its central line. The prongs shall taper uniformly and finish sharp so as to pass the performance test given in 6.2. All edges excepting the ends of prongs shall be rounded. The retractors shall be free from scales, burrs, pits and other surface defects. It shall be passivated and polished bright.

5. HEAT TREATMENT

5.1 The retractors shall be suitably hardened and tempered to give a hardness of 430 to 490 HV.

6. TEST

6.1 Corrosion Resistance — The retractors shall be tested for corrosion resistance as prescribed in 6.1.1.

6.1.1 Copper Sulphate Test — The sample shall be scrubbed with soap and warm water, rinsed in hot water, followed by a dip of ethyl alcohol (95 percent) and dried. The sample shall be completely immersed in copper sulphate solution at room temperature for 6 minutes and shall then be washed off with fresh water or with wet cotton wool. The copper sulphate solution shall be made up as follows:

Copper sulphate ($\text{CuSO}_4 \cdot 5\text{H}_2\text{O}$)	4.0 g
Sulphuric acid (H_2SO_4) (sp gr 1.84)	10.0 g
Water (H_2O)	90.0 ml

There shall be no red stains or spots on the sample after the test, but the polished surface becoming dull may be permitted.

6.2 Performance Test — The prongs of the retractor shall be made to hold on a piece of chamois leather and the retractor pulled by means of an accurate spring balance with a force of 1 kg. The prongs shall hold to the chamois leather without piercing it.

7. MARKING

7.1 The retractors shall be clearly and indelibly marked with the manufacturer's name, initials or trade-mark.

7.1.1 The retractors may also be marked with the ISI Certification Mark.

NOTE — The use of the ISI Certification Mark is governed by the provisions of the Indian Standards Institution (Certification Marks) Act, and the Rules and Regulations made thereunder. Presence of this mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard, under a well-defined system of inspection, testing and quality control during production. This system, which is devised and supervised by ISI and operated by the producer, has the further safeguard that the products as

actually marketed are continuously checked by ISI for conformity to the standard. Details of conditions, under which a licence for the use of the ISI Certification Mark may be granted to manufacturers or processors, may be obtained from the Indian Standards Institution.

8. PACKING

8.1 The retractors shall be wrapped individually in moistureproof paper or polyethylene bag. They shall be packed in a manner so as to avoid contact with one another. The sharp prongs shall be suitably protected.

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AMENDMENT NO. 1 JULY 1975
TO
IS:4244-1967 SPECIFICATION FOR
RETRACTORS, SKIN, DOUBLE ENDED

Alterations

(Page 5, clauses 6.1 and 6.1.1) - Substitute the following for the existing clauses:

'6.1 Corrosion Resistance - The instrument shall satisfy the boiling and autoclaving test as mentioned in IS:7531-1975*.'

(Page 5, foot-note) - Insert the following foot-note at the bottom of the page:

'*Method for boiling and autoclaving test for corrosion resistance of stainless steel surgical instruments.'

(CPDC 11)

Reprography Unit, ISI, New Delhi